 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGES 17	PAGE 1
	APPL. NO. SEE PG below	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

PERMIT TO CONSTRUCT/OPERATE

COMPANY NAME

TESORO REFINING AND MARKETING CO
P.O. BOX 817,
WILMINGTON, CA 90748-0817

EQUIPMENT LOCATION

2101 E. PACIFIC COAST HIGHWAY
WILMINGTON, CA 90744
Facility ID#: 800436
Facility Type: NOx & SOx RECLAIM (Cycle 1), Title V


EQUIPMENT DESCRIPTION

Additions are shown as underlined and deletions are shown as ~~strikeouts~~.

Section D: Permit to Operate

Equipment	ID No.	Connected To	RECLAIM Source Type / Monitoring Unit	Emissions and Requirements	Conditions
PROCESS 15: STORAGE TANKS					P13.1
SYSTEM 7 : INTERNAL FLOATING ROOF TANKS					S13-7
STORAGE TANK, FIXED ROOF <u>INTERNAL FLOATING ROOF</u> , TANK 80071, 79774 BBL; DIAMETER: 117 FT; HEIGHT:41FT 9IN <u>FLOATING ROOF, PONTOON,</u> <u>WELDED SHELL</u> <u>PRIMARY SEAL, CATEGORY A,</u> <u>METALLIC SHOE</u> <u>SECONDARY SEAL, RIM</u> <u>MOUNTED, MULTIPLE WIPERS</u> <u>TYPE</u> A/N: 470116- <u>509883</u>	D613			HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003] BENZENE: (10) [40CFR 61 Subpart FF_01, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003] [40CFR 60 Subpart Kb, 10-15-2003]	<u>B59.4, C1.47,</u> <u>C6.4, H23.1,</u> <u>K67.15 K171.3,</u> <u>K67.2, E336.2</u>

- | | |
|--|--|
| * (1) Denotes RECLAIM emission factor | (2) Denotes RECLAIM emission rate |
| (3) Denotes RECLAIM concentration limit | (4) Denotes BACT emission limit |
| (5)(5A)(5B) Denotes command and control emission limit | (6) Denotes air toxic control rule limit |
| (7) Denotes NSR applicability limit | (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.) |
| (9) See App B for Emission Limits | (10) See Section J for NESHAP/MACT requirements |
- ** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGES 18	PAGE 2
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

FEE ANALYSIS

All fees shown in Table 1 have been paid by the applicant.

Table 1 – Summary of Fee Analysis

A/N	Equipment Description	BCAT/CCAT	Fee Schedule	Fee Type	Fee	XPP Fee	Total Fee
509882	Permit Amendment	555009 (BCAT)		FP –RECLAIM/ Title V Significant Amendment	\$1687.63		\$1687.63
509883	Storage tank	251902	C	Modification	\$3,244.91	\$1622.46	\$4867.37
Total							\$6555.00

BACKGROUND AND PROCESS DESCRIPTION

This application was received by the AQMD on April 14, 2010 from Tesoro Refining And Marketing Co for the modification of storage Tank 80071 (D613). The tank will be modified from fixed roof tank to internal floating roof tank. The internal floating roof will be full contact new cable-suspended floating roof (see attachment 2 for the manufacturer design and description). The new roof would be equipped with a shoe-type primary seal and a rim mounted secondary seal, both Category “A” seals.

The reason for the modification is to retrofit the tank from fixed roof to internal floater.

This subject tank is currently covered by permit no. G2095 (A/N 470116).

This tank was constructed in 1964 storing crude oil under A/N A-23687 (P04549) and vented to vapor recovery system.

In 1985, there was a change of ownership from Texaco Inc to Texaco Refining & Marketing Inc under A/N 136877(M46926).


In 1998, there was a change of ownership from Texaco Refining & Marketing Inc to Equilon Enter LLC, Shell Oil Products US under A/N 346340 (F17926).

In 2007, there was a change of ownership from Equilon Enter LLC, Shell Oil Pro US to Tesoro Refining & Marketing Company under A/N 470116 (G2095).

Table 2 lists the application submitted along with the equipment description and the proposed modification. See Attachment 3 for previous permits and Attachment 4 for MSDS sheet.

Table 2

A/N	Device No.	Current A/N	Equipment Description	Current Permit line	Proposed Change
509883	D613	470116	Storage tank, No. 80071, Fixed Roof, Crude Oil	None	Convert from Fixed roof to Internal Roof with primary and secondary seals category “A”

 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGES 17	PAGE 3
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

COMPLIANCE RECORD REVIEW

The facility's compliance history for the past 2 years indicates one NOV (P52842) is still pending (see Attachment 1). P52842 was issued to Tesoro on 4-27-10 for multiple violations of Rule 1189(c)(3). An emergency hearing was conducted at the AQMD Hearing Board on 4-28-10 and the facility was denied a variance. Tesoro is expected to be placed under an abatement order by the District to have this compliance issue resolved. Note that the HGU-2 unit has been shutdown since 4-6-10 and is not expected to operate till a variance or order of abatement is granted. The details of this NOV is with Attachment 1.

EMISSIONS CALCULATIONS

The emissions from tank 80071 was calculated using EPA tanks 4.09 program (Attachment 5) Since the subject storage tank was installed in 1964 and no modification was done, this tank was not subject to New Source Review Regulation (REG XIII) and has no throughput or commodity limit.

Calculations procedures for the District's New Source Review(NSR) Regulation with regards to determining Offset and BACT requirements are contained in Rule 1306 (b) & (d).

For determining BACT and offset requirements, the net increase is based on the post-modification potential to emit minus the actual emissions calculated pursuant to Rule 1306(c) (1) if the source was never subject to Rule 213 or Regulation XIII.

In accordance to Rule 1306(c) (1), the emissions amount shall be calculated from the average of actual emissions, as determined from company records, annual emissions declarations pursuant to Rule 301, or other data approved by the Executive Officer or designee, whichever is less, which have occurred each year during the two-year period immediately preceding the date of permit application. Since this tank is a pre-NSR tank, the pre-modification emissions were calculated using two years average (see Attachment 6)

As shown in Attachment 5, the post –modification maximum potential to emit (PTE) for ROG is calculated with EPA Tanks 4.09d based on Sweet crude oil with API 37.

Table 3: Max. Potential change in VOC emissions


Tank No.	Product	Throughput (barrels/month)	Pre-Modification Emissions previous 2-year lbs/yr (lbs/day)	Post-modification Product	Post-Modification Emissions with internal floating roof	Change
80071 D613	<i>Light Crude Oil (RVP 6.6)</i>	<i>none</i>	2246.12 +2571.595 =4817.715/2 =2408.875lbs/year (6.59)	<i>Crude Oil (RVP 6.6)</i>	2342.83 lbs/yr 6.42 lbs/day	-66.045 lbs/yr -0.18 lbs/day

*AER emissions for year 2008= 2246.12

*AER emissions for year 2007= [1093.23+ (2956.73/2=1478.365)]=2571.595

AER emissions for year 2009 were not used because they were not considered representative due to the DCU coker fire on September 25, 2009, which resulted in reduced refinery crude throughput.

See attachment 6 for AER Emissions

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 4
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY


RULES EVALUATION

PART 1: DISTRICT RULES

Regulation II- PERMITS

Rule 212: Standards for approving and Issuing Public Notice (Amended Nov. 14, 1997)

- 212 (a) The applicant is required to show that the equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminants in violation of provisions of Division 26 of the State Health and Safety Code of these rules. The installation of the internal roof of the storage tank is expected to comply with this requirement.
- 212(c)(1) Public notification is required if any new or modified permit unit, source under Regulation XX, or equipment under Regulation XXX may emit air contaminants located within 1000 feet from the outer boundary of a school. The source is not within 1000 feet of a school, public notification is therefore not required.
- 212(c)(2) Public notification is required if any new or modified facility has on-site increases exceeding any of the daily maximums specified in subdivision (g) of this rule. There is no increase in emissions with the tank's modification, public notification is therefore not required.
- 212(c)(3) Public notification is required if the maximum individual cancer risk (MICR), based on Rule 1401, exceeds one in a million (1×10^{-6}), due to a project's new construction or proposed modification. According to 1401(f)(3), for the purpose of determining MICR, the increase in emissions from the modified permit unit shall be calculated based on the difference between the total permitted emissions after the modification and the total permitted emissions after modification and the total permitted emissions prior to the modification as stated in the permit condition. This modification does not result in an increase in emissions, public notification is therefore not required.

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 17	PAGE 5
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

212(g) This subdivision sets forth the process for federal public notification and distribution and specifies the daily maximum emissions increase as follows:

<u>Air Contaminant</u>	<u>Daily Maximum in lbs/day</u>
Volatile Organic Compounds	30
Nitrogen Oxides	40
PM10	30
Sulfur Dioxide	60
Carbon Monoxide	220
Lead	3

Since there is no increase in emissions associated with modified source, public notification is not required.

Regulation IV PROHIBITIONS

Rule 401 Visible Emissions (Amended November 9, 2001)

Operation of the storage tank is not expected to result in visible emissions. Therefore, compliance with this rule is expected.

Rule 402 Nuisance (Adopted May 7, 1976)


Operation of the storage tank is not expected to result in a public nuisance. Therefore, compliance with this rule is expected.

Rule 463 Organic Liquid Storage (Amended May 6, 2005)

This rule applies to any above-ground tank with a capacity of 19,815 gallons or greater for storing organic liquids. This internal floating roof tank is subject to the requirements of Rule 463

(c)(2)(B)

463(c)(2)(B) A fixed roof tank which has an internal floating-type cover installed, modified, or replaced after June 1, 1984, shall have a closure device which consists of either a single liquid mounted primary seal or a primary and a secondary seal. All openings and fittings shall be fully gasketed or controlled in a manner specified by the Executive Officer. The closure device shall control vapor loss with an effectiveness equivalent to a closure device which meets the requirements of subparagraph (c) (1) (A). Seal designs are identified on the current list of seals approved by the Executive

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 6
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

officer (See Attachment 2 for AQMD approval letter and the seals drawings)

The proposed internal floating roof for tank 80071 will be equipped with category “A” primary and secondary seals that meet the requirement of this rule. All openings and fittings will be gasketed and controlled in a manner that meets Rule 1178 requirements, which are more specific than the requirements of this rule. Additional specification of the seal and opening fittings/controls is contained in the Rule 1178 evaluation.

Compliance with Rule 463 is expected with proper recordkeeping and inspections

Regulation XI - SOURCE SPECIFIC STANDARDS

Rule 1149: Storage Tank Cleaning and Degassing (Amended July 14, 1995)

-

This Rule has requirements for tank cleaning and degassing operations. Emissions from above ground tanks are required to be controlled by one of the following methods: liquid balance, negative pressure displacement and subsequent incinerations, vapor condensation with a refrigeration system, or any other method which controls VOC by at least 90%. The permit condition S13.7 requires continued compliance with this rule.


Rule 1173: Fugitive Emissions of volatile Organic Compounds

This rule specifies leak control, identification, operator inspection, maintenance, and recordkeeping requirements for valves pumps, compressors, pressure relief valves, and other components from which fugitive VOC emissions may emanate. Since this project does not involve a change to any component outside of the storage tanks, no change in fugitive VOC emissions is expected.

Rule 1178: Further Reductions of VOC Emissions from Storage Tanks at Petroleum Refineries (Amended April 7, 2006)

This Rule applies to facilities which VOC emissions exceeding 20 tons in their Annual emissions Report (AER) for any year starting with 2000. Tesoro/Shell AER for the year 2000 exceeded 20 tons VOC. The rule requires that the Internal Floating Roof Tank shall be equipped as follows:

- (a) Equip each fixed roof support column and well with a sliding cover that is gasketed or with flexible fabric sleeves;


 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGES 17	PAGE 7
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

- (b) Equip each ladder well with a gasketed cover. The cover shall be closed at all times, with no visible gaps, except when the well must be opened for access;
 - (c) Equip and maintain other roof openings according to the specifications listed in subparagraph (d)(1)(A) or (d)(1)(C);
 - (d) Equip the tank with a rim seal system consisting of either a primary and a secondary seal meeting the specifications listed in subparagraph (d)(1)(B); and
 - (e) Ensure that the concentration of organic vapor in the vapor space above the internal floating roof shall not exceed 30 percent of its LEL for those installed after June 1, 1984. A permit condition with this requirement will be imposed.
- As shown in the table below, the proposed fittings and seals for the proposed pan type internal roof meet the requirements of this rule

Summary of Roof Opening /Fitting Controls and seals

Roof opening/ Fitting or seal type	Roof Seal and Opening /Fitting configuration		Applicable Rule 1178
	No	Type	
Support Column and well	8	Sliding Cover gasketed	1178(d)(3)(A)
Ladder Well	1	Cover,gasketed	1178(d)(3)(B)
Access Hatch	1	Cover, bolted & gasketed	1178(d)(1)(A)(i)
Automatic Gauge Float Well	0	Cover ,bolted & gasketed	1178(d)(1)(A)(i)
Guage Hatch/sample well	0	Weighted mechanical actuation, cover,gasketed	1178(d)(1)(A)(ii)
Rim Vent	0	Gasketed	1178(d)(1)(A)(iv)
Vacuum Breaker	1	Weighted mechanical actuation, gasketed	1178(d)(1)(A)(v)
Roof Drain	0	Slotted membrane fabric cover that covers at least 90 percent of the area of the opening.	1178(d)(1)(A)(vi)
Slotted Guidepole	1	Gasketed sliding cover with pole wiper	1178(d)(1)(A)(vii)
Primary seal	1	Mechanical shoe	1178(d)(1)(B)(i)
Secondary Seal	1	Rim mounted and shall not be attached to the primary seal	1178(d)(1)(A)(ii)

This tank, with the proposed internal floating roof, is expected to comply with the requirements of this rule

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 8
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

Regulation XIII: NEW SOURCE REVIEW

RULE1303: REQUIREMENTS(Amended Dec. 6, 2002)

Rule 1303(a):-Best Available Control Technology

Since this application do not result in a net emission increase of any non-attainment air contaminant, BACT does not apply. However, tank will be equipped with current BACT(internal floating roofs with District Category “A” –approved seals).

Rule 1303(b):-This subdivision lists the following requirements for a permit to construct for any new or modified source which results in a net emission increase of any non-attainment air contaminant at a facility.

Rule 1303(b)(1):-Modeling

Rule 1303(b)(2):-Emissions Offsets

Rule 1303(b)(3) Sensitive Zone Requirements:

Rule 1303(b)(4) Facility Compliance

Rule 1303(b)(5) Major Polluting Facilities

(A) Alternative Analysis

(B) Statewide Compliance


(C) Protection of Visibility

(D) California Environmental Quality Act (CEQA)

Since this application does not result in a net emission increase of any non-attainment air contaminant, all the requirements of this subdivision do not apply.

This tank was not subject to NSR, however, after the subject modification, it is subject to NSR, the 30-day average emissions for the subject application is 6.42lb/day VOC to reflect the baseline emissions in the NSR.

Tank commodity and throughput limits will be added for this tank

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 17	PAGE 9
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

Regulation XIV - TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1401: New Source Review of Toxic Air Contaminants (Amended March 4, 2005)

This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations or modifications to existing permit units which emit toxic air contaminants listed in Table 1 of this rule.


1401(d) This subdivision lists the following requirements for a Permit to construct for any new or modified source:

- 1401(d)(1)MICR and Cancer Burden
- 1401(d)(2)Chronic Hazard Index
- 1401(d)(3)Acute Hazard Index
- 1401(d)(4)Risk Per Year
- 1401(d)(5)Operating Conditions
- 1401(d)(6)Risk Per Year

According to 1401(g)(1)(B), the requirements of subdivision (d) as listed as listed above, shall not apply to a modification of a permit unit that causes a reduction or no increase in the cancer burden, MICR or acute or chronic HI at any receptor location.

For the purpose of determining MICR, cancer burden and chronic HI due to a modified permit unit installed prior to October 8, 1976, resulting from the addition of air pollution controls installed solely to reduce the issuance of air contaminants, emissions shall be calculated according to 1401(f)(3)(C). Emissions are calculated using the worst case scenario. The emissions from the storage tank before and after installation of the internal floating roof tank are then calculated using EPA Tanks 4.0 program and are tabulated in Table 3 which can be found on page 3. The Tank Emissions Calculation Report after modification is included in Attachment 5.

Because the modification of the tank will not increase the VOC emissions as calculated according to R1404(f), there would not be an increase in toxic health risk. Therefore, all the requirements of this subdivision do not apply.

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 10
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

Reg XX *Regional Clean Air Incentives Market (RECLAIM)*

Rule 2005: New Source Review for RECLAIM

Tesoro is a NO_x and SO_x RECLAIM facility. It is therefore subject to Reg XX.

2005(c) **Requirements for Existing RECLAIM facilities**

This subdivision requires BACT, modeling and proof of sufficient RECLAIM Trading Credits (RTC) for an application for a Facility Permit amendment that results in any increase in NO_x and SO_x emissions. This application will not increase NO_x or SO_x emissions, therefore this subdivision does not apply.


2005(g) **Additional Federal Requirements for Major Stationary Sources**

This subdivision lists additional requirements for application for a Facility Permit or an Amendment to a Facility Permit for a new, relocated or modified major stationary source, as defined in the Clean Air Act, 42, U.S.C. Section 7511a(e). Section 7511a(e)(2) defines modification as any change at a major stationary source which results in any increase in emissions. This application will not increase NO_x or SO_x emissions, therefore this subdivision does not apply.

PART 2: STATE REGULATIONS

CEQA California Environmental Quality Act

CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) submitted by Tesoro indicates The expected impacts of the project on the environment are not significant since the net emission ROG increase does not trigger the thresholds ROG: 55 LBS/DAY of The District's CEQA Guidelines. Therefore a CEQA analysis is not required

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 17	PAGE 11
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

PART 3: FEDERAL REGULATIONS

Standards of Performance for New Stationary Sources (NSPS)

40 CFR 60, Subpart K: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced after June 11, 1973 and Prior to May 19, 1978.

This standard does not apply. This tank was not constructed or modified between June 11, 1973 and May 19, 1978.

40 CFR 60, Subpart Ka: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced after May 18, 1978 and Prior to July 23, 1984.

This standard does not apply. This tank had no modification between May 1978 and July 23, 1984.

40 CFR 60, Subpart Kb: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced after July 23, 1984


The subject of this application is the modification of the tank by changing from fixed roof to an internal roof tank.

Modification is defined in 60.14 as any physical change or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies. Since the modification to the tanks does not result in an increase in emissions

Reconstruction is defined in 60.15 as the replacement of components of an existing facility to such an extent that:

- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
- (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

The installation of the new roof and reconstruction of the tank qualifies as a “reconstruction” since the fixed capital cost of new components exceeds 50 % of the fixed capital cost for construction a new tank (see the attached e-mail by Mike Kulakowski dated on April 26, 2010). Therefore, the tank is subject to the requirements of this rule.

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 12
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

Subpart CC: National Emissions Standards for Hazardous air Pollutants for Petroleum Refineries

63.640 Applicability and designation of affected source(Amended October 28, 2009)

The refining process units and equipment located at the Tesoro are subject to the requirements of this subpart addressing

- Miscellaneous process vents
- Storage vessels
- Waste water streams, and
- Equipment leaks
- The modified storage tank as proposed in this application is subject to storage vessels standards.

63.646 Storage vessel provisions (Amended October 28, 2009)


Group 1 storage vessels are subject to the requirements of these provisions. Group 1 storage vessel is defined as a storage vessel at an existing or new source that has all the following:

	Existing source	New source
Design capacity	≥177 m ³ (46,764gal)	≥151 m ³ (39,894gal)
Vapor Pressure	≥8.3 kPa(1.2 psia)	≥3.4 kPa(0.49 psia)
HAPs	>4% wt	>2%wt

According to Tesoro, the subject tank does contain greater than 4% HAPs, therefore, the subject tank is not considered a Group 1 storage vessel and the requirements of these provisions do not apply. It is noted that this storage tank is classified as a Group 2 storage vessel which is defined as a storage vessel that does not meet the definition of a Group 1 storage vessel. The only requirement for operators of Group 2 storage tanks is to report these tanks in the Notification of Compliance Status Report as discussed below.

63.655 Reporting and Recordkeeping Requirements(Amended October 28,2009)

63.655 (f) The operator of a source subject to this subpart shall submit a Notification of Compliance Status Report which includes identification of each storage vessel subject to this subpart. The subject storage tank should be included and identified in the Compliance Status Report as a Group 2 storage vessel(defined in 63.641 as a storage vessel that does not meet the definition of a Group 1 storage vessel). The facility is expected to comply with the requirement by including this subject tank as a Group 2 vessel in this report after its modification.

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 17	PAGE 13
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

Reg XXX Title V Permits


Rule 3001(a): Applicability (Amended November 14, 1997)

Tesoro Refinery is currently subject to Title V. The permit issued for this tank will be issued as a revision of the Title V permit. Permit revisions are categorized into the following four types: administrative, minor, de minimus significant and significant.

As defined in Rule 3000, a significant permit revision means any facility permit revision that is not eligible for administrative permit revision, minor permit revision, or de minimis significant permit revision procedures. Such revisions include any of the following:

1. relaxation of any monitoring, recordkeeping, or reporting requirement, term, or condition in the Title V permit;
2. the addition of equipment or modification to existing equipment or processes that result in an emission increase of non-RECLAIM pollutants or hazardous air pollutants (HAP) in excess of any of the emission threshold levels ;
3. any modification at a RECLAIM facility that results in an emission increase of RECLAIM pollutants over the facility's starting Allocation plus the nontradeable Allocations;
4. requests for a permit shield when such requests are made outside applications for initial permit or permit renewal issuance;
5. any revision that requires or changes a case-by-case evaluation of: reasonably available control technology (RACT) pursuant to Title I of the federal Clean Air Act; or maximum achievable control technology (MACT) pursuant to 40 CFR Part 63, Subpart B;
6. any revision that results in a violation of regulatory requirements;
7. any revision that establishes or changes a permit condition that the facility assumes to avoid an applicable requirement;
8. installation of new equipment subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63; or,
9. modification or reconstruction of existing equipment, resulting in an emission increase subject to new or additional NSPS requirements pursuant to 40 CFR Part 60, or to new or additional NESHAP requirements pursuant to 40 CFR Part 61 or 40 CFR Part 63.

The Tesoro Los Angeles Refinery has been designated as a Title V facility. The initial Title V permit was issued on November 23, 2009. Since the proposed changes for this tank is subject to new NSPS requirements pursuant to 40 CFR Part 60, and new NESHAP requirements pursuant to 40 CFR Part 61 or 40 CFR Part 63, this revision will be considered a significant revision to the existing Title V permit. For Significant revisions, AQMD needs to notify the public and the EPA

 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGES 18	PAGE 14
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

prior to permit issuance. Therefore, the permit is subject to a 30 day public Notice and a 45 day EPA review and comment period.

Since Tesoro is expected to be placed under order of Abatement for the NOV(P52842) that was issued for HGU-2 unit and this unit has been shutdown since 4-6-2010 and is not expected to operate till a variance or order of abatement is granted. Thus the District, considers this facility to be in compliance with all the permit requirements, and shall recommend the issuance of the subject permit to construct/operate.

RECOMMENDATIONS

Permit to construct/operate is recommended subject to the following conditions:

PROCESS CONDITIONS

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF

[40CFR 61 Subpart FF, 11-12-2002]

[Processes subject to this condition : 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15]


SYSTEM CONDITIONS

S13.7 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463
VOC	District Rule	1178
VOC	District Rule	1149

[RULE 1149, 7-14-1995; RULE 1178, 12-21-2001; RULE 463, 3-11-1994; RULE 463, 5-6-2005]

[Systems subject to this condition : Process 15, System 1 , 2]

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 17	PAGE 15
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

DEVICE CONDITIONS

B. Material/Fuel Type Limits

B59.4 The operator shall only use the following material(s) in this device :

Crude Oil, Gas Oil, Diesel Oil

[RULE 1303, 5-10-1996]

[Devices subject to this condition : D613, D618, D621]

C. Throughput or Operating Parameter Limits

C1.47 The operator shall limit the throughput to no more than 350,000 barrel(s) in any one calendar month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.


In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance.

While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : **D613**, D618, D621]

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 16
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

C6.4 The operator shall use this equipment in such a manner that the _hydrocarbon concentration_ being monitored, as indicated below, does not exceed 30 percent of the lower explosive limit.

The operator shall use an explosimeter or equivalent device to monitor the hydrocarbon concentration in the vapor space above the floating roof device on a semi-annual basis.

[RULE 1178, 12-21-2001; RULE 463, 3-11-1994; RULE 463, 5-6-2005]
[Devices subject to this condition: D610, **D613**, D618, D621, D630]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	Kb

[40CFR 60 Subpart Kb, 10-15-2003]

[Devices subject to this condition : D469, D524, D598, D610, **D613** D630, D648, D659, D982, D1001, D1002, D1078]

E. Equipment Operation/Construction Requirements


E 336.2 The operator shall vent the vent gases from this equipment as follows:

All vent gases under normal operating shall be directed to a vapor recovery system consisting of compressors D641, D642, D643 AND OR D644, which can be operated independently to maintain a system vacuum that efficiency collects all vented gases.

This equipment shall not operated unless the vapor recovery system is in full use and has a valid permit to receive vent gases from this equipment

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D458, D459, D460, D461, D462, D466, D467, D520, D521, D526, D531, D533, D534, D544, D546, D547, D548, D550, D551, D552, D553, D554, D555, D556, D557, D558, D559, D560, D561, D562, D563, D564, D565, D566, D567, D569, D571, D572, D573, D574, D575, D576, D577, D578, D579, D589, D584, D592, D593, D594, D595, D596, D597, D598, D599, D600, D602, D603, D604, D606, D607, D608, D611, **D613**, D614, D615, D616, D617, D619, D620, D622, D623, D624, D625, D626, D627, D628, D631, D633, D634, D636, D637, D639, D640, D807, D808, D809, D982, D998, D1001, D1002, D1500]

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 17	PAGE 17
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrewis	CHECKED BY

K. Record Keeping/Reporting

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput and vapor pressure of stored liquid.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D520, D521, D531, D533, D534, D543, D544, D546, D548, D549, D554, D555, D556, D558, D559, D560, D562, D563, D565, D566, D567, D568, D569, D571, D572, D573, D575, D576, D577, D578, D579, D581, D582, D583, D584, D585, D586, D587, D588, D591, D592, D593, D594, D596, D597, D598, D599, D603, D604, D605, D609, D611, D612, **D613**, D614, D615, D616, D617, D618, D619, D620, D621, D622, D623, D625, D626, D627, D628, D629, D631, D632, D633, D634, D635, D636, D637, D640, D647, D648, D649, D650, D651, D652, D653, D654, D655, D656, D658, D660, D1001, D1002, D1095, D1500, D1555]

K67.15 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- Throughput and vapor pressure of stored liquid.
- Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank.
- Other records that may be required to comply with the applicable requirements of District Rules 463, 1149 and 1178.

[RULE 1178, 4-7-2006; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]


[Devices subject to this condition : **D613**, D618, D621]

K171.3 The operator shall provide to the District the following items:

Final drawings and/or specifications of the internal floating roof to be installed/constructed shall be submitted to the District within 30 days after its construction

[RULE 1178, 12-21-2001]

[Devices subject to this condition: D610, **D613**, D618, D621, D630]

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>ENGINEERING AND COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	PAGES 18	PAGE 18
	APPL. NO. 509883	DATE 4/26/2010
	PROCESSED BY SAAndrawis	CHECKED BY

Attachments

1.	NOV's and NC's Issued
2.	Manufacturer Design
3.	Previous Permits
4.	MSDS Sheets
5	Emissions Calculations
6	AER (previous emissions)